

Department of Energy

Washington, DC 20585 AUG 2 2 2002

MEMORANDUM FOR DISTRIBUTION

FROM:

JESSIÉ HILL ROBERSON ASSISTANT SECRETARY FOR

ENVIRONMENTAL MANAGEMENT

SUBJECT:

Survey on Nuclear Transportation

To support a consistent, timely, and cost-effective implementation of 10 CFR 830, Subpart B to transportation activities, the Office of Environment, Safety and Health (EH) needs field input (attachment). Please provide to me, by August 30, 2002, your input to the EH survey.

If you have any questions, please contact me, or your staff may contact Sandra Johnson at (202) 586-0651.

Attachment

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Department of Energy

Washington, DC 20585

August 14, 2002

MEMORANDUM FOR JESSIE H. ROBERSON, ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT, EM-1

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FROM:

BEVERLY A. COOK

ASSISTANT SECRETARY

ENVIRONMENT, SAFETY AND HEALTH

SUBJECT:

Request for Survey on Nuclear Transportation

Shipments of nuclear materials on Department of Energy (DOE) sites are subject to the provisions of the Nuclear Safety Management Rule, 10 Code of Federal Regulations (CFR) 830, Subpart B. The rule was issued on January 10, 2001, and requires compliance by April 10, 2003.

At the request of the Office of Environmental Management (EM), the Office of Environment, Safety and Health is leading a working group considering the need for additional rule transportation guidance. Some feel that the safe harbors for transportation (DOE-O-460.1A, Packaging and Transportation Safety, DOE-G-460.1-1, Implementation Guide for Use with DOE O 460.1A, Packaging and Transportation Safety, DOE-O-461.1, Packaging and Transportation of Materials of National Security Interest, and DOE-M-461.1-1, Packaging and Transfer of Materials of National Security Interest Manual) provide sufficient guidance. Others think there is a need for further guidance.

To assure that resolution of this issue is based on field experience, I am requesting that you complete the attached survey relating to 10 CFR 830 transportation requirements. Please forward your response to Richard Stark at the Office of Nuclear and Facility Safety Policy (EH-53) by August 30, 2002. The Office of Environment, Safety and Health will develop a compilation of field responses which will serve as the basis for addressing this issue.

In addition to providing a timely response to this survey, please designate a nuclear transportation specialist who can be contacted for more detailed discussions and provide assistance to the working group.

Attachment

cc:

S. Johnson, RL

R. Black, EH-53

J. Helfrich, GC-52

R. Crowe, NA-53

Below are generalized statements of the 10 CFR 830 requirements, put in terms of transportation activities followed by an associated question. Please indicate how your site is addressing, or is planning to address, these requirements. Also, please indicate in your response to each question whether you think additional guidance is needed or not needed (beyond that in the rule, the Implementation Guides and the DSA safe harbors). Include what type of additional guidance would be most helpful, if possible.

The basic methodology to address these questions is available and is being put into place at several DOE sites. DOE intends to make the results of the survey available to contractors throughout the complex so that everyone can take advantage of the available information. Additionally, where the available methodology may be incomplete, DOE has formed a transportation issues working group to generate additional guidance, as necessary.

General Requirements:

- 830.202 (b)(1): Define the scope of transportation activities
- 830.202 (b)(2): Identify and analyze the hazards associated with transportation activities
- 830.202 (b)(3): Categorize the transportation activities
- 830.202 (c)(1): Keep the transportation safety basis current
- 1. How will you categorize transportation activities relative to DOE STD-1027-92 (as required by 830.202)?
- 2. How do you identify and address transportation hazards relative to 830.202?
- 3. How will you update the transportation safety basis to reflect changes to transportation activities relative to 830.202?

DSA Requirements:

- 830.204 (b)(1): Describe transportation activities to be covered (including the design of safety SSCs) and the work to be performed
- 830.204 (b)(2): Provide a systematic identification of both natural and man-made hazards
- 830.204 (b)(3): Evaluate normal, abnormal, and accident conditions...and consideration of the need for beyond design basis accidents
- 830.204 (b)(4): Derive hazard controls
- 830.204 (b)(5): Define characteristics of safety management programs
- 830.204 (b)(6): Define a criticality safety program
- 4. How will you develop DSAs for transportation activities per 830.204 requirements?

TSR Requirements:

- 830.205 (a)(1): Develop TSRs that are derived from the transportation DSA (TSD or SARP)
- 830.205 (a)(2): Obtain DOE approval of TSRs
- 830.205 (a)(3): Notify DOE of TSR violations
- 5. How will you develop controls for safely performing nuclear transportation activities?
- 6. How will you identify the controls for nuclear transportation that rise to the level of TSRs? (i.e., those controls that are designated as operating limits, surveillance

Nuclear Transportation Safety Survey (Continued)

requirements, administrative controls and design features in the TSR as required by 830.205)

7. How will you get approval of transportation TSRs per 830.205 requirements?

8. How will you notify DOE of transportation TSR violations?

USQ Requirements:

830.3 USQ definition:

- (1) Identify situations where the probability or consequences of a transportation accident or the malfunction of equipment important to safety previously evaluated in safety analyses could be increased
- (2) Identify situations where a transportation accident of a different type could be created

(3) Identify situations where a margin of safety could be reduced

(4) Identify situations where the safety analyses may not be bounding or may be otherwise inadequate

9. How does your USQ process address transportation activities relative to 830.3 and 830.203 requirements?